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SATURDAY, MAY 7, 1836.

"Essay on Calcareous Manures."

The last number of Silliman's Journal contains an elaborate review of the "Essay on Calcareous Manures;" and the following extract will show that the critic entertains the same favorable opinion of its merits that we have expressed on former occasions:

"We have called the use of lime a secret, and it was not only so to the practical farmer, but to the man of science; for even the researches of Davy, who was well aware of its importance, have not completed the theory of its action. It is therefore with no small pride that we can refer to a countryman of our own, as having finished what the most acute researches of European chemists had left unaccomplished. This credit is due to Mr. Ruffin."

The principal fact detailed in the subjoined paragraph of the review, was confirmed by our own experiments in 1834, on the limestone soil of this district:

"One curious fact was observed by Mr. Ruffin, in his chemical analysis of the soils of Virginia, namely, that even in regions where the rock by whose decomposition the soil was formed, was limestone, not only did no carbonate of lime manifest itself by effervescence with acids, but no precipitate was formed by the tests of lime in the acid solution. He could not admit that in such soils lime was absolutely wanting, and therefore inferred that it was in such a state of combination as to be neither soluble in water, nor decomposable by nitric acid. Such a combination is the oxalate of lime, but as he made no direct inquiry into its presence, and some of his correspondents have questioned the probability of such an union existing, he has, with the true spirit of an inductive inquirer, modified his assertion until farther proof be obtained. We however do not think that so much modesty was necessary, for it can be shown that the formation of oxalic acid, and its consequent combination by superior affinity with lime, whatever may be its previous state of combination, are at least probable, if not certain."

In the following extract, the reviewer has adopted the theory of Sir H. Davy, relative to the effect of plaster, which was controverted by the late Judge PETERS of Pennsylvania. We do not presume however to determine this mooted point:

"It is upon the same principle only, namely, that it serves as the food of plants, that we can account for the effects of gypsum upon certain crops, which in any other mode of viewing them would appear miraculous. This sulphate of lime, if merely ground, has no attraction for moisture; and if burnt, would rather absorb it from the soil than the air; it cannot therefore act as some have supposed, to increase the deposit of dew; it is so sparingly soluble in water, and so inert, that it cannot act as a stimulus,—nor is it certainly followed by exhaustion, as all stimuli must be. But although sparingly soluble, it is still conveyed by water into the bodies of plants, though in small quantities; and as that water undergoes the chemical changes which we know are induced by the vital action of plants, the sulphate of lime must be deposited in them, injuriously perhaps to some, but as a necessary food to others. Thus it has been found that the ashes of clover, lucern, and many of those plants whose growth is known to be most certainly promoted by gypsum, uniformly contain sulphate of lime: It is therefore their essential and appropriate food."

He likewise insists with *M. Puvis*, whose work "On the use of lime as a manure" he also reviews, that as this mineral is a part of the food of plants, liming land is in effect providing food for the plants which are to constitute the crops; and that this use was overlooked by the author of the "Essay on Calcareous Manures." In our 5th volume we endeavored to show that nearly all soils must contain lime in some of its combinations. That view was founded on the researches of geologists; and it is confirmed by the simple fact, that in every part of the country, lime is found in the ashes of vegetables, in the shells of eggs, and in the bones of animals. We therefore conclude as the quantity that enters into the circulation of plants is so very small, that they are at no loss to find enough in any cultivated soil; and that the chief uses of liming consist in *the preservation of putrescent manures*, and in *neutralising the poison of acid soils.*

The importance of lime as the basis of all good husbandry, is illustrated in the subjoined notice of Belgium:

"Those parts of that rich country which are now most remarkable for fertility, as for instance the *Pays de Waes*, were originally barren hills of blowing sand. They now yield a greater product than any other part of Europe. Great industry and labor have no doubt been expended in obtaining and applying putrescent manures, and in this region the clover husbandry had its rise; but with all this, *no permanent fertility could have been given without the use of* LIME. At present a light friable mold of greater depth than can be reached by the plough, and which is therefore occasionally trenched by the spade, covers the whole of the ancient *dunes;* and the whole country presents an aspect, of which no part of ours can even furnish an idea, with the exception of the garden grounds of the *Shakers* at Lebanon."

In noticing an opinion of *M. Puvis*, the reviewer says, "The gases which water dissolves and carries with it, and which yield the carbon and part of the hydrogen of plants, are all derived from the decomposition of organic matter *in the soil itself.* When therefore we can find in the absorption of water by the roots; its ascent in the form of sap; its elaboration in the leaves where so far from an absorption from the atmosphere taking place, oxygen is evolved; in the subsequent descent of the altered sap in the form of gum, resin, &c. a sufficient reason for the supply of the parts M. Puvis seeks in the atmosphere: we are compelled to dissent from his conclusion."

We are not able to discover the necessity for such dissent; and we confess our surprise that a writer of his intelligence should consider the oxygen evolved by leaves as a proof that carbonic acid is not absorbed from the atmosphere. The fact of its absorption is well attested. Dr. Priestly introduced the LEAF of a vine into a phial of carbonic acid gas, and in less than two hours "the fixed air" disappeared. Experiments with similar results, were also made by Ingenhouzs, Woodhouse, T. de Saussure, and Sir H Davy; and the last named chemist, after detailing his own researches on this subject, says, "These facts confirm the popular opinion that when the LEAVES of vegetables perform their healthy functions, they tend to purify the atmosphere." We therefore think the ideas of M. Puvis more correct than those of his reviewer.

But we are told that "the Germans who followed the Quakers in the occupation of the more remote districts of Pennsylvania, brought with them from Europe, a most valuable secret. We call it a secret, for *those of other* BLOOD who see it USED IN THEIR PRESENCE, do not discover its value." Now we are bound to conclude that our reviewer, who has discovered its value, must be of German blood. "Honor to whom honor is due," is our maxim. We are certainly indebted to the Germans for our knowledge of plaster, as a manure, and perhaps for as many other important discoveries as to any other people; but we have seen no competent authority to prove that they introduced the use of lime into Pennsylvania. The reviewer has offered nothing more than his own assertion; and we suspect he is not old enough to remember the time of its introduction there. To say that lime is only employed there as a manure by those of German blood, is a great mistake: It has not foundation in truth. *We know* it was used there nearly half a century ago by those of British blood; and who never suspected they were dealing in a secret; or that they were indebted for it to their German neighbors. Why should they? Who will pretend at this day that the use of lime as a manure, is a recent discovery? or that the memory of its value would not be as easily brought from England as from Germany?

We have been induced to make these remarks out of regard to HISTORICAL TRUTH. The reviewer however, appears to have fully made up his mind on the point which we controvert; and in speaking of the southern part of Hunterdon

county in New Jersey, he says, "The Germans by the use of lime, raise from thirty to forty bushels of wheat to the acre, and their other products are in proportion; the settlers of Yankee and Dutch BLOOD, are *happy* to get from fifteen to twenty"!

We also consider him in an error when he says, "It is only after passing the first range of mountains [from the sea board] that a limestone formation is met with." May we ask what mountain stands between the sands of New Jersey, and the marble quarries below Norristown? or between Philadelphia at tide water, and the limestone region of Lancaster county?

We have only one question more: Who has traced the valley of the Shenandoah into Schoharie?

Analysis of Soils.

It has been given as the *golden rule* in Agriculture, "To use such manures as will make heavy land lighter, light land heavier, cold land hotter, and hot land colder;" or in other words to remedy the existing defect, whatever that may be. In order to do this we must know what that defect is; we must understand the nature of the soil we are to operate upon, in order to determine whether this or that kind of manure is to be applied, or whether a large or a small quantity is needed to bring the proportions of the soil to the standard of fertility. It is therefore of importance that the farmer should be acquainted with the nature and proportions of the constituents of soils; that he should know what these proportions are in such as are most fertile; and also what they are in the soil which he has to cultivate. This cannot be determined with any degree of accuracy but by *analysis*.

Another consideration in favor of analysis of soils, is, that it will substitute precision of language for the very indefinite and unsatisfactory mode of expression which now prevails. Thus for instance, the distinction between a *sandy* and a *clayey loam*, often does not depend so much upon certain proportions of clay and sand, as upon the quality of the soil of the place where the term is used. In a sandy region of the country, a soil might be termed *clayey*, while the *same* soil in a clayey region would be called *sandy*. Another instance:—a large crop of some grain or vegetable is raised; the success is principally owing to the nature of the soil; but unless the proportions of its ingredients are given precisely, instead of describing its qualities by indefinite expressions, we are at a loss to know how to imitate those proportions.

The constituents of soils which more particularly influence their fertility, are these. 1. *Stones and pebbles.* These generally have little other effect than to keep the soil loose and porous, as they are usually hard and unchanging. Sometimes however they absorb and retain water, and also disintegrate and mix with the finer parts of the soil. 2. *Siliceous matter.* This is commonly in the form of fine and coarse *sand*. Soils where this predominates are little injured by water, having little attraction for it, and retaining it feebly. They never *winter kill* wheat. 3. *Aluminous matter.* This is the predominant constituent of *clay* soils. Unlike the preceding, it has a powerful attraction for water, and retains it strongly; hence clay will remain long suspended in water, while sand sinks immediately. Aluminous soils suffer from too much wet, and bake hard in a dry season. 4. *Carbonate of lime.* This exists in the form of limestone, chalk, and shells. It is a principal constituent of marle. Soils which have a due proportion of this ingredient, are naturally fertile and durable in a high degree. 5. *Animal and vegetable substances.* These improve the soil by operating in several ways. They give *warmth* to the soil, furnish nutriment directly to the plant, absorb moisture and nutritious substances from the air, and render the soil loose and preserve it in a state of pulverization. 6. *Water.* The power soils possess of retaining moisture enables them to resist the effects of drouth. In analysis, the quantity of water held by soils after being exposed to the sun's rays, is that only which is considered as forming a component part of them.

The following method of analyzing soils, or ascertaining the proportions of their component parts, is, if carefully conducted, sufficiently accurate for all *practical* purposes.

Specimens of the soil should be taken about three inches below the surface, and from the average of the field. A convenient quantity to experiment upon, after stones are separated, is about 400 grains.

1. Separate by two sieves all the stones and pebbles; with one, those larger than a quarter of an inch in diameter, and with the other those less. To effect this, the soil must be first well dried in the sun and gently bruised in a mortar. Then ascertain by weighing, the rate per cent. each bears to the original mass and note it down.

2. The soil after weighing is then placed in a crucible and heated ten or fifteen minutes to a temperature of about 300 Fahrenheit, constantly stirring it; and if a thermometer is not used, the proper degree of heat may be easily ascertained by means of the wooden rod with which it is stirred; while the color of the wood remains unchanged it is not too hot, but as soon as it begins to become brown, the process must be stopped. It is then again weighed, and the loss is set down as *water*.

3. It is next returned to the crucible, and exposed to a high red heat, till no blackness remains in it, repeatedly stirring it with an iron rod so as to expose new surfaces continually to the air. It is again weighed, and the loss denotes the amount of *animal and vegetable matter*.

4. Mix the remainder with three or four times its weight of water, stir it thoroughly for several minutes, until it is intimately diffused, and then suffer it to rest. The coarse sand will fall to the bottom of the vessel in about a minute, the finer in two or three minutes. The liquid is then poured off into another vessel, the sand dried and weighed, and its quantity noted down as *silicious soil*.

5. The decanted liquid is suffered to stand till it settles and becomes clear; it is then poured off, and the sediment dried at a red heat, weighed, and set down as *aluminous soil*.

6. The presence of carbonate of lime in soil, (which is generally in small quantities,) is readily ascertained by pouring upon it muriatic acid diluted with water. If it contain carbonate of lime, an effervescence immediately takes place in a greater or less degree, according to the quantity. To ascertain the proportion of this ingredient, place a new portion of the soil in a glass vessel, and ascertain its weight; also determine the weight of about a gill of diluted muriatic acid, and place weights in one side of the scales to balance them both; then pour on the muriatic acid. In three hours, all the carbonic acid from the carbonate of lime will have been driven off, and after blowing it out of the vessel, ascertain the loss of weight. Then as 22 is to 50, so is this loss to the amount of carbonate of lime in the soil.*

It may be important to be able to detect sulphate of lime (gypsum) in soils, though it is not generally looked upon as a component part. The following is Sir H. Davy's method:—A given weight of soil must be heated red for half an hour in a crucible, mixed with one third of powdered charcoal. The mixture must be boiled for quarter of an hour, in half a pint of water, and the liquid passed through a filter, and exposed for some days to the air in an open vessel. If any considerable quantity of gypsum exist in the soil, a white precipitate will gradually form in the liquid, and the weight of it will indicate the proportion.

The most fertile soils are those which contain a proper proportion of the different ingredients. The following are the proportions of a rich alluvial soil, given by Sir John Sinclair as the most fertile for grasses. Silex, (including stones, and sand) 71 parts, alumine 7, carbonate of lime 6, animal and vegetable matter 9. It also contained one part in 200 of gypsum. The proportions agree very nearly with those given by Professor Eaton of the best river alluvion near Troy, N. Y. These were, silex (including stones and pebbles) 75, alumine 7, carb. lime 3, decomposed animal and vegetable matter 11, soluble salts 1, water 3. A soil whose constituents approach these, cannot be unproductive in any climate.

The minuteness of the division of the parts of soil greatly influences its qualities. In the first of the above soils, 185 parts only out of 400 could be separated by a very fine sieve. Poor soils often have 300 parts out of 400, of coarse materials.

The attraction which soils have for water, so as to remain suspended in it when mixed with it, also influences their qualities. According to Eaton, when any soil, or any portion of it, will remain suspended in water over *four hours*, wheat sown in it is often "winter killed." The river alluvion (above given) settled clear in two hours. A clay alluvion of the following composition did not settle till 26 hours:—Silicious soil 48, aluminous 39, carb. lime 2, soluble salts 2, animal and vegetable matter 5, water 4.

In determining the standard proportions for a good soil, it must be remembered, that as different plants have different systems of roots, branches, and leaves, they flourish best in different soils; bulbous rooted plants need a looser and lighter soil than fibrous rooted; and plants having only short fibrous roots, demand a firmer soil than such as have long, and deep tap roots. It may also be observed, that a rainy region of the country needs a light soil, while a dry one needs a rich retentive soil, in order to prevent too much wet in the one case, and drouth in the other.

* Where accuracy is required, or where the proportion of carbonate of lime is large, the lime must be deducted from the silex, and the weight of the carbonic from the animal and vegetable matter.

Agricultural Associations.

When the legislators of New York return to their homes, and there learn the value placed by their constituents upon their labors, they will probably find that of all their multiplied enactments, there is but a single one which in every quarter has met with unqualified approbation. We here allude to the law making appropriations for a thorough geological and mineralogical survey of the state, including of course the branches of natural history, collateral with the above. This provision is one which does honor to the state, and we trust will be executed in the same spirit in which it is conceived. With the resources of our state we have hardly begun to be acquainted, and any movement which shall develop these, whether above or beneath the surface, will in a short time be repaid ten fold. For instance, should the survey of the southern range of counties lead to the discovery of some of those inexhaustable mines of coal, which are so common but a few miles distant in Pennsylvania, in positions readily accessible hy rail-road or canals, how much would the immensely valuable property owned by the state in the salt springs of Salina be benefited, and thus ultimately the state by the discovery. We trust this work will be carried through in the same liberal manner; and that when the maps, plans, and reports are received, they will not be deposited in the Secretary's office, there to mold or gather dust, but be embodied in a work worthy of the subject, and in a form accessible to every lover of the Empire State.

There is one more subject, now before the legislature, upon which should their action be favorable, a similar unanimous voice of approval would be their reward; but from present indications it is much to be feared that the clamor of rapacious bank applicants—the conflicting interests of multitudinous rail-road speculations—and the less apparent, but not less urgent demands of political operations and arrangements, will give this subject the go-by, and the important benefits which would result to the community, be lost for at least another year. We allude to the proposed appropriation of public money for the benefit of agriculture—a subject not a visionary or an untried one, but which has all to recommend it that the most splendid results and successful experience can show. There can be no doubt, that the few pitiful thousands expended several years since to aid agriculture in this state, have added more than as many millions to the real wealth of the state, beside the revenue it was the means of indirectly furnishing through the Erie Canal. but it is said farmers are growing rich, and cannot stand in need of the bounty of the state. We admit it, and are glad of it, for their wealth is the wealth of the state; it cannot be converted into stocks and sent beyond its limits in an hour's notice, leaving the state as poor as if it never had existed. We are glad farmers are doing well, for they are the men who feed and clothe the remainder, who pay the taxes, and bear most of the burdens of the day; it is a good sign when the base of the social pyramid becomes broader and deeper—it shows that it is able to bear any useful superstructure the exigency of the times may require. But the friends of agriculture, when asking the aid of the state, have never had in view so much the amount received, as the inquiring emulative spirit which, judging from the past, an appropriation by the state would awaken. It was not so much the paltry sum of dollars and cents a few years since distributed among the county agricultural societies, which awakened the dormant farming spirit of the state; it was bringing mind in contact with mind, raising agriculture to the rank of a science as it were, conveying useful intelligence through the whole mass of the farming community, and bringing them to feel and act as if there were yet some things to be learned by the tiller of the soil, before this knowledge could be considered as complete, or his mode of operating beyond improvement. Such were the effects of state appropriation, and such we may confidently expect will again be the result, if the treasury shall be opened in the least degree to the well founded claim of the farming interest.

But whether legislative aid is afforded to agriculture or not, we are happy to perceive that various local associations, agricultural and horticultural, are forming, from which there can be no doubt the most extensive benefits will result. A few weeks since the Farmer recorded the formation of such a society at Skaneateles, embracing in addition to the usual meetings of such associations a Monthly Fair, for the exhibition and sale of such articles as may be offered. We have the good fortune to be acquainted with some of the active members of that society, and embracing as the vicinity does an unusual amount of agricultural wealth and spirit, we trust the inhabitants of that beautiful village, and country around, will support the association with a zeal proportioned to its merits, and not suffer it to languish for want of funds, or attendance on its monthly sales or fairs. In England, such days of sale, either monthly or weekly, are quite common, and found to be of great convenience both to buyer and seller; and they have been adopted to some extent in the eastern states with like success. The fair at Brighton, now one of the most extensive markets in the United States, had a beginning not much superior in prospects to the one at Skaneateles, unless its vicinage to Boston should be taken into the account. The true policy of farmers is to depend on themselves; if aid is afforded by the legislature, let it be accepted with thankfulness, but let it not be looked upon as indispensable. The man who waits for his neighbors to reap his wheat-field, will probably suffer a severe loss, and finally be obliged to perform the labor himself. G.

Picking Geese.

The celebrated Dr. Adam Clarke, at the close of one of his visits to Ireland, gives the principal characteristics of the people in some dozen propositions, summing up the whole with the following assertions and inferences: "They are cruel and bloodthirsty;—the annual plucking off the feathers of living geese, is not less a proof of their cruelty than their extreme poverty. Inhumanity to brutes is ever connected with cruelty to man; hence they are incendiaries, and often murderers." What a pity that Mrs. Trollope had not read this passage before she concocted her book on the Americans. With the fact undenied, that two-thirds of the women in this country have plucked the feathers from living geese, how easy it would have been, under cover of such authority, to have demonstrated to the satisfaction of the Quarterly Reviewers, and all cockneys, that a great majority of the fair sex in America were incendiaries and murderers. The quotation from Dr. Clarke only proves that great men are not always the most accurate observers; as, however ignorant of the fact the Dr. may have been, it is nevertheless true, that living geese are subjected to the operation of plucking even in merry England as well as in Ireland and America. G.

Ornamental Plants.

In an extract from A. J. Downing's paper on the naturalization of Plants, it was mentioned that some of tender constitutions had become hardy from being grafted on hardy stocks; and the cause was ascribed to the *deep* roots of the stock which *transmitted* the warmth from below. We are inclined to believe however, that a better reason can be given. If we examine the white Italian Mulberry, we shall find that it ceases to grow much sooner in the season than the *Morus multicaulis;* and whatever influence the graft of the latter may exercise over that stock, it is not to be presumed that it is unrestricted in the same manner as if it stood on its own roots. It must be checked in its growth, and have more time to harden and mature its wood before the commencement of severe frosts.

It is on the same principle that this tree is more hardy on dry steril soils. The same writer says that "many tender kinds of herbaceous plants and small shrubs may be naturalized upon *dry rock-work*, or aggregations of stones mingled with soil, where they are found to thrive perfectly. We observed in the Botanic garden at Cambridge, Mass. an *Azalia indica*, and a species of *Erica* that had braved the exceedingly low temperature of nearly 30 degrees Fah. below zero, the past winter, having been planted several years previous in a mass of rock-work, where they had annually matured their wood in the most perfect manner. Those persons who are acquainted with the comparative delicacy of these plants in a climate so cold as that of Massachusetts, will appreciate at once how thoroughly they had become naturalized by this simple process."

We consider it a very interesting experiment.

Indian Corn.

The way to preserve your Indian corn against the wire worm and against birds, is to dissolve about a pound and a half of copperas in warm water, enough to steep about three pecks of corn, or in other words make the solution as strong as it can be made, put in as much copperas as the water will dissolve, and soak your corn therein 48 hours before you plant it. The corn will thus be secured against the *wire worm*, which destroys the kernel while in the ground, but not against the *cut worm*, which eats off the young shoots just below the surface of the soil. The remedy against the cut worm is the application of quick lime, or unleached ashes, or a mixture of both on the hill, soon after planting. Potash, dissolved in water in the proportion of about one pound of potash to two quarts of water, is said to make an excellent wash for fruit trees, destroying the bark louse, and some say the borer.—*New England Farmer.*

Prepare Seeds for Planting.

Not only Indian corn, but peas, oats, buckwheat, and probably most other seeds, are benefited by wetting them in water, and then rolling them in plaster of Paris previous to sowing. —*Ib.*

COMMUNICATIONS.

LETTERS FROM A FATHER,

Living in the State of New York,

To his Son in Western Pennsylvania.

NO. XIX.

On keeping Hogs and fattening Pork.

To my Son—Another branch of stock husbandry interesting to farmers, and to many who are not farmers, remains to be considered. I am now speaking of the husbandry of hogs, and fattening pork. Almost every family, especially if located in the country, should fatten every year at least one good hog. This is necessary to prevent the waste of many articles which must be cast out, and will otherwise be lost. To farmers, the fattening of pork is often a lucrative branch of their husbandry, and it might become, to many of them at least, far more so than it is, if they would learn how to conduct it in better accordance with the principles of economy. A few suggestions to aid your improvement in this important branch of husbandry, will constitute the subject of this letter.

The husbandman or householder who undertakes to fatten pork, should, in the first place, be careful to procure a good breed of hogs. This is very important, far more so than seems to be generally understood. It is a fact well ascertained, that there are, among different breeds of hogs, very great differences as to their propensities, or lack of propensities, to thrive and fatten. Some are voracious eaters, and yet slow to acquire flesh; while others require but little food to keep them in a thrifty condition, and possess withal remarkable propensities to fatten. Those who best understand the subject, are not of the opinion that large boned hogs, or hogs that are capable of attaining to the greatest bodily stature, are, in general, the most profitable. Unquestionably the most profitable hogs are such as are capable of making the greatest amount of good pork at the least expense. These it is said are not often found among hogs of gigantic stature, but are to be looked for rather among the smaller breeds.

There are now in the country several breeds of hogs, known by their distinctive names, and all recommended by their respective friends, as breeds of superior excellence. Among these are the China breed, the Byfield, the Berkshire, the Bedford, and some others. I know not their comparative merits. It may not be easy for you to obtain any of them in their purity, but in different degrees of intermixture the most of them are to be found in nearly all parts of the country. It is not so much my object to put you on pursuit of any particular breed of hogs, as to impress on your mind the importance of seeking after and obtaining a *good* breed. This, it is believed, you can do, without traveling far in pursuit of your object. For further illustrations of the subject on which I am now writing, I refer you to the Chapter on Swine, published in the Genesee Farmer, current volume, No. 1, over the signature of Ulmus. The gentleman who wrote the Chapter referred to, is master of the subject on which he wrote, and his opinions are entitled to great respect.

To the householder who intends to fatten pork, it is a matter of some importance to know, whether hogs that have been kept over the winter, or spring pigs, are the most profitable for that use. When it is intended to fatten pork on a small scale, in connection only with one, two, or three hogs, it is, in general, the better way to depend for that purpose entirely on spring pigs, and thus save the expense and trouble incident to keeping hogs through the winter. Pigs that come in March or early in April, can, if they are of good breed, easily be made to weigh, at the proper season for butchering, 200 weight or more, afer they are dressed. If taken proper care of, they will do this on an average. The pork thus obtained will, in general, have cost less than such as has been made of hogs that have been kept over the winter. As hogs do not, in general, thrive well in the winter; as their keeping at that season is peculiarly expensive; and as they are rarely found in the spring to be much in advance of what they were in the fall, it is worthy of consideration whether it would not be better to depend for making pork chiefly on spring pigs. I propose this as a question, not meaning to be considered as answering it in the affirmative.

All preliminary questions being settled, and possession gained of a good breed of hogs, the next care of the husbandman should be, to make himself acquainted with the best methods of feeding them, and to practice accordingly. To afford them, in every stage of their existence, plentiful supplies of food, at least sufficint supplies to keep them, all the while, in a thrifty and growing condition, is an indispensable requisite. A poor hog, whose carcase is composed of little else than skin and bones, is a sight dismal to behold, and whenever such a wretched animal is seen, he bears disgraceful testimony against the wisdom, the economy, and almost the moral rectitude of his proprietor. No one should undertake to keep more hogs than his means of keeping will enable him to keep, at all times, in perfectly good order. Keeping too many hogs is a very common error, and it prevails most among the poorer classes of community. It is not so well understood as it should be, that the economy of making pork consists much in making a large quantity from a small number of hogs. The sentiment which I wish to express is, that any given quantity of pork, made of hogs weighing severally when dried, 300 weight or more, comes to the proprietor at less expense, and yields him a greater profit than the same quantity would if made of lighter hogs. It is supposed the two classes of hogs here spoken of are of the same age, and that the difference in their produce is the result either of different treatment, or a difference in the quality of their breeds. The doctrine which I desire to inculcate on you is, not to multiply hogs, but when you have set your aim at any given quantity of pork, which in your judgment is needful to be produced, employ for its attainment only the smallest number of hogs, from which it will be practicable to produce the desired quantity. If hogs that have been kept over the winter are selected for fattening, the produce of each hog in pork should not be less than 300 weight.

It has been said, hogs require plentiful feeding. As they have voracious appetites, and are not at all difficult in the choice of what they eat, their food may be drawn almost indiscriminately out of nature's vast store house. They will eat, with greediness, every kind of flesh, and there are not many vegetable productions from which a hungry hog will turn away. In the summer season, scarcely any thing accommodates hogs to better advantage than a fresh clover pasture. In such a pasture they will, although no other food be given them, thrive, and make considerable acquisitions of flesh. Of the various sorts of swill commonly made use of as food for hogs, nothing need be said, except that swill of every kind is the better for having become a little sour. Care however should be taken, while aiming at this object, not to let it sour so much as to become putrid. Almost all sorts of fruit, such as peaches, plums, and especially apples, are palatable and nutritious to hogs. So too are potatoes, and all the other roots that have been enumerated in any of my preceding letters. Most of the articles here mentioned, will be useful to hogs in some degree, although given to them without cooking, but it is now well understood, that almost every substance made use of as food for hogs, is susceptible of great improvement, by being boiled or steamed. That such is the fact, I am satisfied from my own experience. I have boiled old corn for hogs, and the results were such as satisfied me, that my labor had been exceedingly well applied. Cooking corn, as any other grain, fits it for the use of hogs in all respects as well as it can be fitted by grinding, or any other process. Is it not better then to cook it, and thus save the millers toll, together with the expense and trouble incident to carrying it to mill, and getting it back?

I am now ready to offer a remark which I consider as worthy of more than ordinary regard. The remark is, that at every domestic establishment, where it is intended to fatten pork, there should be provided a suitable apparatus for cooking food for hogs. This apparatus should consist of a kettle or caldron, that may cost from five to seven dollars, suitably set in mason work, and inclosed with a small building, or at least covered with some sort of roof to shelter it from the storms. Such an establishment, even when pork is fattened only on a small scale, would quickly remunerate its expense in preparing food for hogs, besides being very useful for many other purposes. Here corn, or any other grain, may, with little expense, be boiled or steamed, and thus rendered far more nutritive to hogs than it will be without cooking. Here too apples, potatoes, pumpkins, and almost countless other vegetables, may be cooked in such a manner as to become wholesome and nutritious food for hogs.

Fattening hogs altogether upon corn, as was formerly the general practice, is now considered as too expensive to admit of justification on the principles of economy. It is good practice to commence fattening hogs on peas. But when peas are not provided, potatoes may be used in the first stages of fattening to great advantage. These however, more than almost any thing else, require cooking to fit them for use. It has lately been discovered, that hogs fatten well upon apples, as well, we are told, as on any other food whatever. Sweet apples are supposed to be the best, but it is said any sort of apples, if cooked, answer a good purpose for fattening pork.

New York State, March, 1836. A Father.

Improved Harrow.

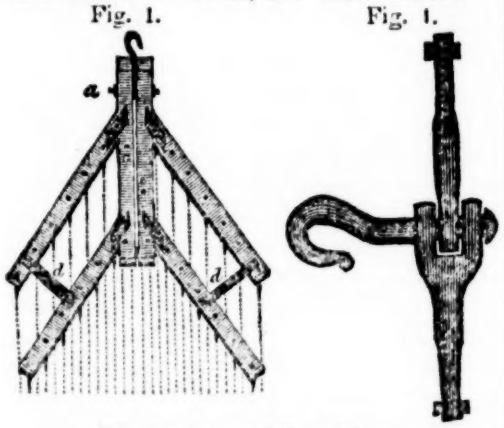
BY GEO. GEDDES.

LUTHER TUCKER, Esq.—I send you a drawing of my harrow for publication, if you should think it worth the engraving, and the room that it will take in your paper. This harrow has been in use three seasons in its present form, and perhaps ten in the form given it by my father, upon which form this is an improvement, consisting of the joints in the center. Some of the advantages secured by this harrow are,—it requires less power than the same number of teeth in the patent joint harrow, (of which by the by there is a drawing in Rees' Cyclopedia, a very old work.) It is not liable to clogg from the position of the center teeth, and if it should clog, the driver has only to lift up one side while under motion, and it immediately cleans itself, while if the patent harrow clogs in the part next the horses, and that is the part most likely to clog, it is necessary to stop while it is cleared.

It is adapted to every variety of ground. On smooth land it moves without perceptible motion at the hinges—in rough, stumpy, or stony land, by its hinges it is fitted to circumstances. In passing between two stumps whose distances are not equal to the width of the harrow, the wings are lifted up, while the center is kept down, and the shape of it is such that the timber cannot catch and break. It is lighter than the common harrow with the same number of teeth, the length of the whole timbers being but twenty-eight feet, and if made properly is very strong.

This harrow is getting into use, and with a view to its *proper construction*, and to furnish all with the benefits of it, I am led to make this communication. Yours, &c. GEO. GEDDES.

Fig. 1. Fig. 1.



Explanation and Description.

a and *b* hinges, which allows it to fit into unevennesses of the surface passed over. The hinges being inserted from corner to corner of the timber, the harrow will be more portable, as one half can be laid over on the other, while moving it from field to field.

The hook by which it is drawn, is a continuation of the pivot on which the hinge turns, as shown on a larger scale, fig. 2.

The teeth, *c c*, are curved, otherwise the tracks made by them will be too far apart. *d d*, two Swedes' bars, bolted on the top of the wood and fastened by screws above.

The side pieces have tenons, passing through the middle pieces, the joints being secured by iron plates above and below, riveted together. The size of the timber three by three and a half inches. The iron used for teeth, is seven-eighths of an inch square, and running within two inches of each other, the thirty teeth make a breadth of four feet ten inches, every part of which is harrowed alike fine.

Teeth passing so nigh each other as within two inches from center to center, is perhaps more than would be necersary for common use. Twenty-two teeth, so set as to run within three inches of each other, making a breadth of five feet three inches, would make a lighter harrow, and do the work as well as a square harrow with thirty teeth.

Destroying Canada Thistles.

BY W. G.

It is undoubtedly true, that most of the noxious weeds with which so many farms are infested, and which add so much to the labor, and detract so much from the profits as well as the pleasures of farming, have been in a long course of years imported from abroad. Such is the case with the dock, daisy, Jonswort, and a multitude of minor nuisances; still it is equally unquestionable that the master spirit of them all, the *cuicus arvensis*, or the Canada thistle, is strictly our own; with all its means of extension, and accumulated powers of mischief, it is purely American. When the Catholic Missionaries, more than two centuries ago, first discovered this thistle on the banks of the St. Lawrence, and struck with the beauty of its flowers and its fragrance, transmitted it to Paris as a plant of great promise, they little understood the nature of the pest they were introducing into Europe, which it has since nearly overrun; and when the farmers of New-England and New-York first saw the intruder springing up on their farms or by the way side, and so far despised it as to suffer it to take root unmolested, little understood the vantage ground they were giving to their most formidable foe.

On the errors or oversight of the past it is now useless to speculate. The Canada thistle, like sin, with which it is closely associated in the earliest authentic records of our race, is among us; it has come up over the length and breadth of the land, and instead of fruitlessly enquiring how either of these evils came here, or foolishly blaming those by whom they were introduced, we shall be acting a much more rational part in devising and putting in execution the best methods of speedily exterminating them, or at least checking their extension.

The Canada thistle is a perennial plant, that is, it is one which will live a great number of years, or forever, as present appearances, in no case with which we are acquainted, indicate a voluntary relinquishment of their hold, or that they will, as in common parlance is said of most other weeds, run themselves out. The thistle spreads both by its roots and by its seeds. In the autumn every wind in those parts of the country—and there are too many such—where it is allowed to ripen its seeds with impunity, is feighted with the flying pestilence. The seeds float down our rivers, and propagate themselves on the shores, as the banks of the Connecticut and Merimac amply testify. They are carried in the hay and provender of the traveller, and perhaps more than by all these ways, are scattered by being mixed with clover and grass seeds, and thus distributed over every section of the country. As a seedling, and in its first beginnings, there are few plants more easily destroyed than the thistle; but when once it has fairly obtained a foothold, and and its long, jointed, horizontal roots begin to fill the ground in every direction, none are found more obstinate to subdue. The frequent ploughings which the soil in grain growing sections of our country is obliged to undergo, has a direct tendency to spread the thistle; as every ploughing, if not followed up, only multiplies the sets a thousand fold; and besides, such turnings of the soil gives an opportunity to the seeds, which floating through the air happen to fall upon a field, to germinate, whereas without such ploughing and consequent covering in the soil, they might have lain harmless for years.

The rapidity with which the thistle spreads in lands ploughed in the ordinary manner, arises from the nature of its roots, which are filled with joints, from each of which a stalk springs, thus furnishing a new nucleus or point of support and propagation. These horizontal roots penetrate the earth in favorable situations to a great distance, and they seem to possess a power of throwing up shoots or suckers from a greater depth than most other plants. The attention of many of our ablest farmers has been forcibly called to devise the best methods of suppressing the thistle, and the results of their experience and experiments have in different ways been laid before the public. These results, as coming from practical men, and consequently the more valuable, are worthy the notice of all upon whose farms the thistle is encroaching; and show that the conduct of those who have ceased to make efforts to prevent their spread, and are beginning to look upon the thistle as a necessary evil, is deserving the severest censure. The Canada thistle can be destroyed—it can be exterminated—but to effect this, a knowledge of the best means must be obtained—decision, priomptitude and *union*, are required.

Mowing them frequently, and with some at particular times of the year and moon, has been much relied on for destroying the thistle, but we think with little reason. During an acquaintance of more than twenty years with this weed, and witnessing mowings at all periods of their growth, we have never known a patch of them entirely destroyed in this way. We have seen them thinned, checked, but not exterminated; and mowing with us has always left them ready to take the first opportunity for revivification and extension. It is barely possible, that in some favorable season, and when the plants had been nearly exhausted in producing and ripening their flowers and seeds, that a single mowing may have entirely destroyed them, but the occurrence must be very rare, and the result not by any means to be expected. Still mowing thistles is beneficial, as cutting them in meadows clearly shows, and they should be gone over with the sythe at least twice a year, as that only will prevent some from ripening their seeds.

Cutting them and sprinkling them with salt, has been recommended as a very efficient mode of destroying the thistle. When a stalk of this weed is cut close to the ground, and the stump covered with salt, there can be no doubt that the root to some extent will perish; but if there is untouched on the long horizontal root a single plant by the salt, that part will live and furnish a new nucleus, from which the plant will rapidly propagate and spread. It is eveident, therefore, that for large patches salt is a very precarious resource, and not to be depended on; where there are but few stalks, and salt applied to each one, the case is different. Some who have applied salt, have probably failed by allowing cattle and sheep to run upon the ground, and thus have it licked off before it had time to produce its effect.

Another method proposed, is to suffocate the thistles by covering them so closely as to exclude the light and air, and thus cause their death. This has been done by covering them with boards, with the refuse of flax, with chaff, and by straw. Many years since we destroyed a patch of Canada thistles by simply heaping upon them a quantity of straw that had remained in the barn over the winter. Not one survived the application. We remember too covering to the depth of eighteen inches with chips not thoroughly rotted another patch, and they came up through the mass with a vigor increased ten fold from their use. It is evident, however, that the refuse of flax, chaff, or even straw, cannot meet the constantly increasing demand made on the farmer from this source; and hence some different and more easily applicable, if not more effectual plan, must be devised for their suppression.

Either of the two following methods—methods which have the sanction of both philosophy and experience—will, if thoroughly carried out, effectually destroy the thistle; and to one or the other of these ways, farmers who wish to rid themselves of this nuisance, may resort with confidence. The first method is by summer fallowing. We do not mean summer fallowing, as it is generally practiced, viz: ploughing up the grouund twice or thrice in the season perhaps; but commencing with the plough as soon as the thistles show themselves in the spring,and repeating the operation as often as they appear above ground, which in the forepart of the summer will be as often as once a fortnight. The only rule is to keep them constantly under; none must be allowed to shoot; and if this system is faithfully adhered to, the thistles will soon be at an end. We know this method requires considerable labor and care, and prevents the use of the land for a spring or summer crop; but these are minor considerations compared with the certainty of destroynig the thistle.

The other effectual method, and the one which we would advise in most cases to be pursued, is to plough the thistle ground thoroughly, if in the fall so much the better, and in the spring, after the necessary preparation, plant the ground with potatoes or corn. These may be hoed in the usual manner two or three times, only taking particular care that not a plant escapes the hoe, and pulling by hand those that grow in the hills, so that in no case a shoot shall be left above the surface of the earth. After the corn and potatoes have attained some size, their growth has a tendency to check the thistle, and the scattering plants that appear must be extirminated by going over the ground as often as their springing up shall render such an operation necessary. To cut these scattering thistles, and the deeper they can be cut the better, an instrument made something like a chisel, with a long handle, will be found very useful. The greatest danger to be apprehended in this mode of destroying the thistle is, that some plants may be overlooked in the hills, and by thus giving the roots time to recruit nearly or quite undo all that has been done. We wish here to repeat, and impress upon the mind of every farmer who engages in the destruction of the Canada thistle, that the grand secret lies in adopting a plan of operation which shall give them no resting place, no breathing time. No half way measures can be effectual; ploughing, if not often repeated,only scatters them the more, and hoeing will be equally useless if not carefully persevered in. The method of destroying by planting and repeated hoeings has this advantage, that while if well performed it is equally successful with summer fallowing, the crop will in most cases pay the extra expense incurred. while naked fallowing returns little or nothing for the additional work expended.

The time however to attack the thistle is on its first appearance, and never to wait until the horizontal shoots are formed, and the train laid for a century of evils. The seedling thistle is as easily destroyed as any weed of the garden or field; and even after it has begun to spread for a single season or so, no great effort is required to kill them. But when a farm is half covered,and plague spots of an acre or two abound, then they cannot be put down without great care and labor. In all evils precaution is better than cure, and we advise farmers, one and all, not to overlook the first appearance of the thistle; let the spot where they are discovered be carefully marked, and by occasionally visiting the spot, and cutting them below the surface of the earth, or pulling them by hand, which may then easily be done, one season will be their last. The evil produced by the Canada thistle is great; it is also rapidly increasing, and unless extra exertions are used, will soon become most formidable. It is not however hopeless, and in this case as in all others, "*nil desperando*," should be the motto of every farmer. W. G.

Ruta Baga, Mangel Wurtzel, and Carrots.

BY O. P. Q.

Practical farmers always wish to know the result of experiments tried in the various branches of husbandry in which they are engaged. It is not sufficient for them, that a plausible theory has emanated from the brain of one who is much better skilled in the use of the pen, than in holding the plough. We wish to know the minutæ, not only of the process by which he arrives at his conclusions, but the variations which usually attend the bringing any theory to the test of actual experiment.

It is a very common remark that writers upon agriculture are mere theorists. But however well the remark may apply to other ages and other countries, to this it is becoming more and more inapplicable. We have many writers of highly cultivated minds, who are practical agriculturists; and the amount of information which they communicate yearly is of great value.

Not to make the preface longer than my story, or lay claim to any usefulness in my communications, I would merely say, that having cultivated ruta baga for three years past,and mangel wurtzel and carrots for the last season, (see vol. 5, page 390,) I am willing that others should know of my failures as well as my success, and my opinion of their relative value as food for farm stock.

Ruta Baga.

My success with this root has never been good. I think the failure to be attributed to the soil, being heavy, more inclined to clay than sand. It evidently requires the lighter soils. I have found the culture very inconvenient as they must be often wed and hoed in the most busy season of the year. My crop last year was tolerably good, considering the disadvantages ander which they were cultivated. They are very easily kept through the winter, either buried in the field or stored in cellars. They are good for the table, for sheep and cattle. But for horses or hogs they will bear no comparison with carrots or potatoes. The labor of cutting them is considerable, as they are hard, and dangerous for cattle unless cut fine.

I would not wish to discourage any one from raising them, even on heavy soils, if they have leisure to weed and hoe them sufficiently during wheat harvest. I intend to continue their culture, but reduce the quantity until I can give what I do raise the requisite attention.

Mangel Wurtzel.

So far as one year's experience goes, I am highly pleased with this root. My crop kept well buried in the field. A few of the upper courses were frozen, but as I fed them before they thawed, their value was not much diminished. I commenced feeding to new milch cows in March, slicing them and mixing a little barley meal with them. They are very brittle and juicy, and my cows gave almost as much milk as when feeding upon the best of pasture in the summer. I also fed them to sheep having lambs along in April, and think they preferred them to ruta baga. Cattle and sheep require more salt than usual while feeding on them. I found no tendency in them to cause the scours, as suggested by some writers. Hogs eat them freely, but horses are rather shy of them. It is not necessary to cut them for sheep or hogs, and the larger ones may be fed to cattle without danger of their becoming choked by them.

Carrots.

This is a root which has long been cultivated in gardens, yet few have learned their value. The remark made by some writer in the Farmer, that they were worth as much per bushel as oats for feeding horses, does not seem so extravagant to me now,as when I first read it. Although I have instituted no accurate experiment to ascertain their value as horse feed; this much I have learned, that horses are very fond of them, and my horses, which are very heavy horses, became fat on cut straw and three quarts of barley meal,with five or six carrots, for a daily allowance. When I corded my crop, I covered them with their tops, thinking to make them of some use, although nothing will eat them. This was unfortunate, and came near being the ruin of the crop, as they fermented and rotted, and would have rotted the whole heap, had I not opened them early. Although some of the upper courses were frozen, the frost does not injure them as much as other vegetables. For milch cows, working oxen, horses, hogs and sheep, I know of nothing better than carrots. The seed does not always vegetate, and they are rather a small affair when first up, but after they are up an inch or two, they may be cultivated with as little trouble as any root. Mangel wurtzel has, however, an advantage over them, in that the tops of the wurtzel will almost pay the whole expense of cultivation, while carrot tops are useless. Wurtzels grow much larger, and are much more easily gathered, while the larger carrots grow so deeply in the ground

as almost to require a steam engine to pull them.

Thus much for the experience of O. P. Q. in the root culture.

East Bloomfield, April 28, 1836.

From the Maine Farmer.

Horse Rake.

FRIEND HOLMES—I have used a horse rake a little of the common form, which must be *lifted* over the winrow; have seen several other kinds, some with *thills*, others revolving—and a few months since, I examined all the models in the patent office; I also read the description of a very good one in your paper; but all I have seen, have defects in construction or *action*, which I have taxed my poor inventive powers to remedy. You will laugh, when I tell you I was *rubbing* and *thumping* the necessary *bumps* for many a year before the homely article I am about to describe presented itself to "my mind's eye."

Make two rake heads of the usual form, ten feet long with nineteen teeth in each, the end teeth at least six inches from the end of the head, a little shorter than the others, that they may not catch the traces. Make the eighth tooth from each end six inches longer than the others and larger, with their points a very little turned up, and finish them cleverly for *handles*. The teeth between these two may be a little, say two inches, shorter than those towards the ends, for a reason which will soon be evident. When these are done, lay one on the ground, and bore holes and put in 4 or 5 rounds, slanting a little backwards, so long that, when the other head is by like means fastened on the upper ends, with the teeth the opposite way, there shall be two feet two inches between the heads. Have two round rods of iron, a half inch in diameter, with shanks turned at right angles, so as to drive into each head, and then connect and hold them together. On these rods place a *ring* and *swivel*—the rings large enough to slide freely—the swivels properly formed to fasten the traces to.

Now all is ready for operation. The oblique position of the rods causes the rings to fall near the lower head; the long teeth in the upper head serve as handles, until you have gathered enough for a winrow, when they are suffered to go forward, at which time the rings on the rods slide to the other head, which becomes the *lower* one in its turn, and you are presented with a fresh pair of handles. "Do you twig?"

Yours truly, JAMES BATES.

Norridgewock, March 21, 1836.

Sea Sand as Manure for Potatoes, &c.

A letter from William Moody to the Hon. Josiah Quincy, published in the 4th volume of the Mass. Agr. Repository, p. 353, recommends sea sand as an antidote against the wire worm, and has no doubt it would prove efficacious against other insects which infest potatoes while growing. This writer says,—"I am persuaded from experience, that sea sand, put under corn or potatoes with manure, or spread on the land, will go far, if not wholly, to the total destruction of those destructive worms on which nothing else seems to have any effect. It has a beneficial effect spread on land before ploughing, or even after land is planted with corn or potatoes: not only to destroy the wire worm and other insects, but to increase the crop. With my neighbors a load of sea sand is considered preferable to a load of their best manure, to mix in with common barn manure, or to spread on their gardens and low flat land."

Mr. Moody likewise says in the same letter, "late planted potatoes, which are gathered in before ripe, are far the best for seed the next year. If kept in a dry warm place in a cellar, they will be much earlier, and likely to produce more abundantly the next year, and will be as good for use the following spring, though they may not be so good in the fall."

Mr. Moody's opinion relative to planting late or unripe potatoes, is corroborated by an article originally published in the N. E. Farmer, vol. v. p. 409, in which it is stated, that "the ripe potatoe, having performed all its operations, becomes more inert; but the circulation of the sap in the unripe tuber having been stopped, it starts more readily, and with greater vigor when planted; the one seems to die, worn out with age, the other seems accidentally to have fallen asleep, and when awoke possesses an unspent vigor and energy.—*N. E. Farmer.*

Cleanse your Cellars.

If you consider good health an object worth your attention, you will be careful not to breathe the gases which emanate from putrefaction, either those which are caused by the decomposition of vegetable or animal substances. Rotting or rotten potatoes, cabbages, turneps, and other vegetables, as well as beef brine, pork brine, and tainted meats of any sort, are often unsuspected causes of bilious or typhus fevers, and should, therefore, be removed in season to the compost bed, and covered with earth, or otherwise disposed of, so that they may not annoy the senses, or poison the air in and about a farmer's premises. We have been assured by physicians of eminence, that they have reasons for believing that bilious or typhus fevers, of a malignant or fatal kind, have often originated from sources of this description.—*Ib.*

Mangel Wurtzel & Turnep Seeds.

A LARGE importation of superior MANGEL WURTZEL, WHITE FIELD, AND OTHER TURNEP SEEDS, together with a fine lot of English Garden Seeds, of the growth of 1835, just received at the ROCHESTER SEED STORE.

We are confident these seeds will prove of the first quality, and they will be afforded at a less price than heretofore.

may 7 REYNOLDS & BATEHAM.

Broom Corn.

20 BUSHELS New England Broom Corn Seed just received at the Rochester Seed Store. may 7

Seed Oats.

50 BUSHELS English Oats of American growth, weighing 38 lbs. the bushel, for sale at the Rochester Seed Store. Price 65 cts. per bushels. may 7

Seed Corn.

A LARGE supply of the early 12 rowed or Dutton Corn in the ear, just received at the ROCHESTER SEED STORE.

The gentleman who raised this corn writes, that "It was planted from the 18th to the 20th May—cut up on the hill from 5th to 25th Sept.—yield from 85 to 95 bushels per acre—stalks one third less than common 8 rowed yellow, and 14 days earlier."

Also—The other varieties for sale as usual.

Orders for the above and other seeds will receive prompt attention, and should be sent immediately.

apr 30-fif REYNOLDS & BATEHAM.

Flower Seeds and Plants.

IN addition to their former stock, the subscribers are now receiving a new supply of Flower Seeds, including many rare and extremely beautiful varieties never before introduced here. Price, 6 cents a paper—20 varieties for $1, 50 varieties for $2, 100 varieties for $4.

DOUBLE DAHLIA ROOTS.

A fine assortment from the unrivaled collection of Messrs. Buel & Wilson, Albany. These will be potted and ready for sale in a few days.

GREEN-HOUSE OR PARLOR PLANTS.

A splendid collection in a fine healthy condition for sale at low prices.

apr 30-fif REYNOLDS & BATEHAM.

Seed Potatoes.

THE following choice varieties of Potatoes selected with care for seed, may be obtained at the ROCHESTER SEED STORE.

Early Ash leaved Kidney,
Early Frame or June,
Kidney Pink Eye,
Sault St. Marie or Black Kidney,
Foxite,—Irish Cup,
Mercer,—*Mashannock*,

Also for sale Rhubarb or Pie Plant, Sea Kale and Asparagus Roots. ap23f2t

Seed Agencies at Geneseo and Canandaigua.

MR. J. F. WYMAN, Merchant, Geneseo, and Dr. JAMES B. DUNGAN, Druggist, Canandaigua, have each an assortment of Seeds for sale, put up at the Rochester Seed Store. apr 30-f3t

Hussey's Grain Cutter.

THIS Machine has been successfully used in this vicinity for the two last years. It has also been used in the Western States, for cutting both grain and grass. Certificates of a number of experienced farmers who have seen the machine in operation, have been published in the Genesee Farmer, and in other papers. (See Genesee Farmer, Vol. 5, No. 16, page 128.) Further evidence of this kind is deemed unnecessary. The subscriber is duly authorized by the Patentee, to sell rights for any part of the State of New York. Machines may be had by applying to the subscriber, or to B. W. Bills, of Mount Morris. Those who wish for machines, to be ready for next harvest, will do well to apply soon. The price of a machine will not exceed $150. J. HORSFORD.

Moscow, Livingston County, N. Y. ap23f3w

Ely's Vineyard,

HALF a mile east of the Court-House, and 20 rods north of Main street, where may be had various kinds of Grape Vines, from one to six years' growth, at various prices, from one dollar down to six cents, according to the age and quelity of the vine. Also Grape Vine Cuttings.

ALSO—Plum, Pear, Peach, Apple, and Locust Trees, and Shrubbery of different kinds.

The infirmities incipent to old age, induces me to offer the premises for *SALE*. The lot contains two acres of land, handsomely laid out, the center part mostly filled with grape vines, surrounded with fruit trees and shrubbery—the whole nearly inclosed by a board fence and a locust hedge.

Notwithstanding the unprecented cold and frosty weather, we gathered more than 4,000 lbs. of grapes the last season. Had the season been usually good, we probably should have obtained as many as 6,000 lbs. One vine had more 1500 clusters, and we gathered 220 lbs of grapes. Had they ripened well there would have been a great addition to the weight, for as it was, many rotted on the ground. There is a decent and convenient Dwelling House on the lot nearly finished.

An indisputable title will be given, and payments made easy.

If the place is not sold, it will be let on shares for the ensuing season. ALEXANDER ELY.

Rochester, April 7, 1936. ap 9-fif

THE SILK CULTURIST

AND FARMER'S MANUAL.

Published monthly by the Executive Committee of the Hartford County Silk Society, at 50 cents per annum. Volumes I. and II.

THE object of this publication is to disseminate a thorough knowledge of the Silk business. The cultivation of the *Mulberry* Tree in all its varieties—rearing Silk Worms—the production of Cocoons—reeling and manufacturing Silk, and Dyeing the same. The publication will contain a complete manual of the Silk Culture from sowing the seed to preparing for market—Sewing Silk and Twist—and will keep the Culturist advised with regard to the progress of the enterprise—the formation of Societies and Companies, Enactments of Legislatures for the promotion of the object, and facts, and experiments of individuals. It will also contain choice articles on new and interesting subjects connected with agriculture.

THE CULTURIST was commenced in April last, and there are now published *Five Thousand Copies* monthly, with a rapidly increasing circulation. Arrangements have been made to furnish the first volume to those who make early application for the second. Each volume will contain ninety-six quarto pages. One dollar forwarded to F. G. COMSTOCK, Secretary, Hartford, Conn. free of expense, will pay for both volumes, or fifty cents for the latter. The second volume commences the first of April. No subscriptions received unless paid in advance.

Knowing the great difficulty of obtaining genuine Seed at a distance, the Secretary of the Society will forward *White Italian Mulberry Seed for* 1000 *Trees* to those who are subscribers to the First Volume and order the *Second*, and to those who subscribe for both Volumes before the first of July next.

Hartford, Conn. April, 1836.

☞ REYNOLDS & BATEHAM, Agents, Rochester. april 16

Country Residences.

We do not know that the following article may not be appropriately placed under *Geoponics*, although it has something to do with carpentry and painting as well as horticultural husbandry. It is from the Newark Daily Advertiser, and purports to be *number five* of a series of essays under the title of "Country Residences." Its predecessors we have not been fortunate enough to see.

Our times and our region are utilitarian; yet the practical man whose views are enlarged will not fail to see that pleasures of imagination and taste have their price. Decoration naturally comes after use; we build our houses before we deck them. But in the advancement of society there is a stage at which men always set a value upon ornament. And though luxury may grow out of these same circumstances, they have fruits which are desirable, such as increased contentment, placid joy, refined taste, cheerful reflection, and the love of home. On these particulars I cannot enlarge, though each of them is pregnant.

Along the bank of a half-finished canal, I saw, the other day, a settlement which at the distance of a furlong showed the origin of its tenants. Extemporaneous huts, barrel-chimneys, windows without glass, floors without boards, and a dung-hill at the portal; these afforded the diagnosis of a *hovel*. Here was no decoration; and I argue concerning this settlement, that there are no intellectual pleasures, no taste, no gentleness, no refinement, no fireside happiness.

Let me change the scene. I knew a family of English people, no richer than those just noticed, who lived in a dwelling no larger than one of these—but how different! I see it in memory, its whitened palings and beaten walk to the door, its tight sides and close roof; and especially its edge of summer flowers around a plot of the clearest grass, and its roses and woodbine creeping over every window. They were poor, but they were tidy. More than this; they were fond of natural beauty, and fond of home, and therefore always aiming to make home lovely.

Every reader has many times seen the same thing, and some have already learned the connexion between simple decoration and domestic virtue and peace. Why does an English cottage strike an American with surprise? Why does he look, as at a strange thing, upon the French peasantry taking their evening repast beneath their trees and vines? Because we Americans are so particularly *practical*, and so possessed of the demon of Trade, that nothing is valuable which cannot be sold. Value is becoming equivalent to vendibility; valuable means saleable; worth means money. If a flower, or a hedge row, or a cascade, or a bust, or a prospect, add to the price under the hammer, these things are valuable, and are straight way inserted in the lithographic view of the auctioneer. They are useful. Usefulness is that quality of things whereby they bring money. Mrs. Trollope exaggerated in saying that no one could ever hear two Americans talk five minutes without the word "*Dollar*." So Bonaparte exaggerated when he called the British a "nation of shopkeepers." Be it so. Caricatures often tell the truth. Even the hideous concave mirror, though it exaggerate ever so much, shows me some grand blemishes of my face. I have tried the experiment, in walking the crowded streets of our cities, to catch the predominant words of the passers-by. The catalogue is limited, and consists of such as these—"Ten-per-cent"—"Doing a good business"—"Operations in property"—"exchange"—"stock"—"thousand dollars"—"credit"—"profits"—"fortune"—&c. &c.

If a man is so practical that he will not wash his face without "value received," I entertain no hopes of bringing him over. I have no "purchase" for my instrument. Now cleanliness is a sort of decoration; negative, perhaps, but the condition of all the rest. Neatness follows very closely; a cleanly child is usually neat. The cleanly housewife is sure to produce in her cottage a certain trim of symmetrical arrangement, which satisfies the eye. This is neatness budding into beauty. This transition ought to be seized upon wherever it appears. The pleasant little children who are yonder playing in the dust may be *taught* to keep themselves clean, and then to be neat. This is the path towards decoration. Taste needs developement. These creatures may be bred to enjoy ornament. And thus we may get a race of people, even among the poor, who will begin to beautify the land. I live in the hope of seeing cottages along our multitudinous and dirty rail-ways, each adorned, not only with a white surface, and a trig fence, but with roses, tulips, pinks, daisies, and all the pretty gifts of a loving Providence—gifts which our yeomanry have too much banished to green-houses and ballads.

The ways of adorning a house by rural appliances are various, and so well known as scarcely to need enumeration. They may be adapted to the lowliest habitation of civilized man, no less than to the villa or the chateau. Nothing but love for domestic beauty, and ordinary tact, are required, to rear a thousand tasteful abodes along all our highways. And if but one provident householder will begin, we shall find, that humble as his habitaion may be, he will soon be imitated by his neighbors. *Fashion* itself, the cause of so many follies, may be subsidized in aid of virtuous enjoyment. Let some honest dweller in the country, make the trial, by holding up before his mind rural decoration as a distinct object. Let him secure to himself a house and garden where he is willing to spend his life. Let him, as his means allow, have it tight and finished, and by all means duly enclosed. This is the frame-work; after this ensue the details. Let him learn the economy of a little timely paint, and of a fence or hedge which will withstand the assault of winds and beasts. From day to day, as he may be able to snatch a moment for breathing the fresh air, let him remove unsightly objects, and make an entrance upon positive ornament. How easy is it to set out clumps or rows of trees, for shade or fruit, flowering shrubs or evergreen hedges. How agreeable to the wife and the little ones to be called out to join in dropping the cheap flower-seed, or training the luxuriant vine.

WILLIAM ATKINSON,
REAL ESTATE BROKER,

17, *Exchange-street, Rochester.*

BUYS and sells Farms and City Property on commission, and attends to the collection of Mortgages.

☞ Several valuable Farms for sale.

February, 1836. feb 20f6m*

Robbins' Planting Machine.

WITH this Machine Corn, Beans, Peas, Broom Corn, Mangel Wurtzel, Turneps, Onions, and seeds of almost every description, can be planted with more system and correctness than can be done in the usual manner of planting with the hand and hoe. One man may easily plant five acres a day, placing the seeds any given distance apart, from two or more inches, and in rows two and a half feet apart.

Machines can be had by applying to REYNOLDS & BATEHAM, Rochester; C. N. BEMENT, Treasurer of the State Agricultural Society, Albany; BUSHROD BUCK, Lanesborough, Berkshire county, Mass.; and DANIEL T. BUCK, Lowville, Lewis county, agent and proprietor for making and vending said machines, at all of which places it is intended to keep a supply on hand.

Lowville, Nov. 24, 1835. nov 28–6m

Wanted,

A SITUATION as *Gardener*, by a married man with a small family, who has served his time to the business in the old country, and has had several years experience in America—who understands the management of Green and Hot Houses, and is perfect master of his business in all its departments—who has served many of the principal gentlemen in the state of New York, and to whom reference can be given if required. Letters (post paid) stating particulars will be immediately attended to. Direct to J. H., Aurora post-office, Cayuga county, State of New York. april 16–f3t

Chaptals Agricultural Chemistry

A FEW copies of this new and valuable work for sale at the Rochester Seed Store.

april 9–f4t REYNOLDS & BATEHAM.

The two imported Horses,

"TURK" and "ALFRED,"

Will serve a limited number of mares this season, 1836.

"*TURK*,"

WAS bred by Wm. Cobb, Esq, of Lonsbro', Yorkshire, England, is 3 years old, and of a fine bay color. He was got by Goodlass' Catfoss, his dam by Rotsey's Old Volunteer, grand-dam by Battle Stephenson's noted horse Caythorp, great grand-dam by Laurence Stephenson's old horse, which went in one season to 300 mares. Catfoss was got by Young Turk, his dam by Volunteer, grand-dam by Dunsley's noted Coach horse.

The sire of "*Turk*" was allowed to be the best horse that traveled England, and carried off the premiums wherever he was shown; such was the anxiety to obtain his breed, that every gentleman put to him his own stock.

"*ALFRED*,"

Was bred by Mr. Fox of Byton, county of York, England, is 4 years old, and of a rich bay color, was got by Strickland's King Alfred, his dam by Mr. Stubb's old horse, grand-dam by Frank's Volunteer, great grand-dam by Harrison's horse of Sketenbec. Mr. Stubb's old horse was by Dunsley's old horse, dam by Owston's horse of Seamer. Mr. Dunsley's horse was by Agar's Old Dart, dam by Old Rainbow. Frank's Volunteer was by Milner's Old Volunteer of Brandsburton. King Alfred was bred by Sir George Strickland, and was got by Providence, dam by Nichols' Coach horse, grand-dam by Etty's Coach horse. Providence was by Peerless, dam by Volunteer, &c. &c.

The above horses are from the most valuable and celebrated breeds in England, from whence they were brought to this country by Thomas Weddle, now of East Bloomfield, Ontario county, their present owner.

TERMS.

"TURK"—20 dollars each mare,

"ALFRED"—10 dollars do.

Payment 1st January by approved notes without interest.

Those desirous of putting mares are requested to give in their names as early as possible, as the horses will only be allowed to serve a small number this season, and the list has already received many subscribers. They are the joint property of the said Thomas Widdle and George Wordon of Seneca, to either of whom reference may be made for any further particulars.

These horses will stand at Mr. Fordon's, who resides one mile south of Dr. Woodworth's Tavern, Flint Creek, on the Canandaigua and Geneva Turnpike.

Good accommodations for the mares, (which are to be at the owner's risk,) and every attention will be paid to them. THOMAS WEDDLE.

The old Norton Farm, E. Bloomfield, April 1st, 1836.

The noted Bull **"ROVER,"** (imported by Thomas Weddle,) of the pure improved Durham Short Horn breed, will stand at Mr. Fordon's during the months of June and July next for cows, at 5 dollars each. apri. 9–f4t

Monroe Horticultural Garden & NURSERY.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Monroe* co. N.S Y. ept. 18, 1835.